Message

From: Nordine, John [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=6F082FB004BA4D818FE3276686C84C63-JNORDINE]
Sent: 6/1/2017 1:11:48 PM
To: Kay, Robert [rtkay@usgs.gov]
Subject: RE: Techalloy Apr 2017 Monthly Progress Report

The two extraction wells are sampled once per quarter year in the third month of the quarter. These results are also reported in the analytical report, attached, and continue
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to show a downward trend in TCA, TCE and PCE in the groundwater collected for treatment in the pump and treat facility.
3. Upcoming Events/Activities Planned –

From: Kay, Robert [mailto:rtkay@usgs.gov]
Sent: Wednesday, May 31, 2017 5:48 PM
To: Nordine, John <nordine.john@epa.gov>
Subject: Techalloy Apr 2017 Monthly Progress Report

John--I have reviewed the April 2017 Monthly Progress Report for the Techalloy facility in Union, Illinois. I have a number of comments.

Progress and Made: Table on monthly discharge to the treatment plant has been added to report, which is a step forward. Assuming constant discharge from well EW-1 (an assumption that is not explicitly verified) table 1 indicates discharge from well EW-2 has been declining overall for the past 2 years. Per previous reviews, a decline in discharge means a decrease in the extent of the capture zone for well EW-2. A decrease in the extent of the capture zone means it's possible some of the plume may be moving downgradient in the aquifer. Again, it would be beneficial if Autumwood could collect the necessary data to assess a) the lateral extent of the VOC plume in this area, and b) the extent of capture (NOT DRAWDOWN) for wells EW-1 and EW-2 at likely pumping rates.

The rate of pumping from individual wells EW1 and EW2 is still unknown, or at least incompletely explained. Again, we need a clear idea of the pumping rate from each well and how the figure of "EW1 is twice that of EW2" was obtained and its level of accuracy. Knowing the rate of pumping from each well is needed to assess the extent of capture.

Table 2--as near as I can tell the quarterly influent concentrations are presumed rather than measured. As such I don't see that they add value to table 2 and probably should be removed from future submissions. I am confident the treatment system is removing VOC from the effluent, the effluent samples prove it.

The data in tables 2 and 3 provide no information that supports or refutes the effectiveness of the pump and treat system. Statements to the contrary should be removed. Per previous comments these data do not indicate the extent of capture.

Upcoming Events Planned: 1) To my knowledge, EW-1 and EW-2 were never designed to pull back the VOC plume that had migrated beyond their capture zone. These wells were designed to prevent ongoing plume migration downgradient of their capture zone. The efficacy of plume capture by these wells has never been evaluated, and probably should be before the remedial effort here is abandoned.
2) Although Central Wire appears to have made a fairly serious effort to rehabilitate well EW-2, this effort appears to be failing. The effect of this failure on plume containment, along with the efficacy of the EW wells

in the first place, should be evaluated IN THE VICINITY OF WELL EW-2, unless the new paradigm is to allow the plume to migrate unimpeded to the South Branch Nursery well.
3) Issues related to allowing the plume to migrate unchecked will be covered in my review of the remedial options report.

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